

B<sup>9</sup> 16. (Twice Amended) A process as claimed in claim 10, where, after the heating in an oxidizing atmosphere, the resultant solid is suspended in water with addition of at least one alkaline lithium compound, and the resulting suspension is spray-dried at a temperature of from 100°C to 400°C.

17. (Amended) A process as claimed in claim 16, where the at least one alkaline lithium compound is  $\text{Li}_2\text{CO}_3$ ,  $\text{Li}_2\text{O}_2$ ,  $\text{LiNO}_3$ ,  $\text{LiOH}$  or a mixture of two or more of these compounds.

18. (Twice Amended) A process as claimed in claim 9, where at least one of the intimate mixing and the suspension is carried out with addition of the binder in the presence of a sintering aid with a concentration of from 0.1 to 3%, based on the weight of solids employed.

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REMARKS

Entry of the foregoing amendment is respectfully requested prior to examination of the application.

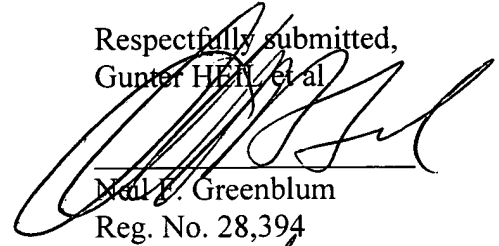
Applicants respectfully note that, upon entry of the present amendment, claims 1, 9, 10, 13 and 16-18 will be amended to clarify their language. In this regard, Applicants note that the present amendment is being presented to even more clearly recite Applicants' invention by placing the claimed subject matter even more in accordance with standard U.S. practice and idiomatic English, and is not intended to be a narrowing amendment.

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Should there be any questions, the Examiner is invited to contact the undersigned at the below listed number.

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**APPENDIX**  
**MARKED-UP COPY OF SPECIFICATION AMENDMENT**

Marked-up copy of paragraph appearing at page 15, lines 8-22:

The lithium oxide intercalation compounds prepared by the process according to the invention have the morphology [described in claim 1] wherein the agglomerates have a specific surface area, determined by the BET method, of from 0.1 to 3 m<sup>2</sup>/g, an agglomerate size, determined from the d<sub>50</sub> value, of greater than 6 μm, a diameter, determined from the d<sub>90</sub> value, of 100 μm or smaller and intrapores having a size of 0.3 μm ≤ d<sub>intra</sub> ≤ d<sub>50</sub>/4 μm, and an intrapore volume of at least 0.08 ml/g, and can advantageously be used for the production of thin-film electrodes. The lithium oxide-containing lithium intercalation compounds according to the invention have an extremely positive effect on the service properties of secondary lithium ion batteries which contain them as active material of the positive electrode. Thus, it is possible, for example, to predetermine the preferred suitability of the intercalation compounds for cells of high power or high energy liberation by adjusting the intrapore volume to the requisite values, it being possible to ensure both high specific charge and high loadability of the cells.

**MARKED-UP COPY OF AMENDED CLAIMS 1, 9, 10, 13 AND 16-18**

1. (Amended) A lithium oxide-containing lithium intercalation compound for thin-film electrodes in [the] a form of agglomerates, [where] the agglomerates [have] comprising:

- a specific surface area, determined by the BET method, of from 0.1 to 3 m<sup>2</sup>/g,
- an agglomerate size, determined from the d<sub>50</sub> value, of greater than 6 μm, and
- a diameter, determined from the d<sub>90</sub> value, of 100 μm or smaller and intrapores having a size of  $0.3 \mu\text{m} \leq d_{\text{intra}} \leq d_{50}/4 \mu\text{m}$ , and an intrapore volume of at least 0.08 ml/g.

9. (Amended) A process for [the] preparation of a lithium oxide-containing lithium intercalation compound for thin-film electrodes in the form of agglomerates as claimed in claim 1, by

- a) preparation of an intimate mixture of [one or more] at least one lithium [compounds] compound and [one or more] at least one transition-metal [compounds] compound, followed by heating and grinding, giving a finely divided mixture;
- b) suspension of the finely divided mixture in water with the addition of an at least partially water-soluble polymeric binder, followed by spray-drying, giving dry agglomerates; and
- c) heating of the dry agglomerates in an oxidizing atmosphere at from 450°C to 900°C.

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10. (Amended) A process for [the] preparation of lithium manganese oxide-containing lithium intercalation compounds for thin-film electrodes in the form of agglomerates as claimed in claim 1, by

- a) a1) preparation of an intimate mixture of [one or more] at least one lithium [compounds] compound and [one or more] at least one manganese [compounds] compound, where at least one of these compounds or the sum of all compounds contains sufficient active oxygen that [the] a number of equivalents of active oxygen is equal to or greater than [the] a number of lithium atoms,
  - a2) heating of the mixture under nitrogen, argon, air, oxygen or an oxygen-containing gas at from 600 to 1000°C and a residence time of from 15 to 120 minutes in a rotary tube furnace,
  - a3) grinding of the heated mixture to give a finely divided mixture;
- b) suspension of the finely divided mixture in water with addition of an at least partially water-soluble binder, followed by spray-drying, giving agglomerates; and
- c) heating of the dry agglomerates in an oxidizing atmosphere at from 450°C to 900°C and a residence time of from 0.5 to 10 hours.

13. (Amended) A process as claimed in claim 12, where polyvinyl alcohol is added in an amount of from 1 to 2% by weight, based on the total weight of [the] solids employed.

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16. (Twice Amended) A process as claimed in claim 10, where, after the heating in an oxidizing atmosphere, the resultant solid is suspended in water with addition of [one or more] at least one alkaline lithium [compounds] compound, and the resulting suspension is spray-dried at a temperature of from 100°C to 400°C.

17. (Amended) A process as claimed in claim 16, where the at least one alkaline lithium compound is  $\text{Li}_2\text{CO}_3$ ,  $\text{Li}_2\text{O}_2$ ,  $\text{LiNO}_3$ ,  $\text{LiOH}$  or a mixture of two or more of these compounds.

18. (Twice Amended) A process as claimed in claim 9, where at least one of the intimate mixing [and/or] and the suspension is carried out with addition of [a] the binder in the presence of a sintering aid with a concentration of from 0.1 to 3%, based on the weight of [the] solids employed.